UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,697	08/30/2001	Armin Amrhein	A34463 (071308.0222)	9229

31625 7590 06/08/2007

BAKER BOTTS L.L.P.
PATENT DEPARTMENT
98 SAN JACINTO BLVD., SUITE 1500
AUSTIN, TX 78701-4039

EXAMINER	
CHANG, SUNRAY	
ART UNIT	**PAPER NUMBER**
2121	

MAIL DATE	DELIVERY MODE
06/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/942,697	AMRHEIN ET AL.	
	Examiner	Art Unit	
	Sunray Chang	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in responsive to the paper filed on April 5th, 2007.

Claims 6 – 15 are presented.

Claims 6 – 15 are rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. **Claims 6, 10 and 13 – 14 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Terrence L. Blevins (U.S. Patent No. 6,445,963 and referred to as **Blevins** hereinafter), and in view of Edmund Choung et al. (U.S. Patent No. 6,564,329 and referred to as **Choung** hereinafter).

Regarding independent claims 6, 10 and 13 – 14,

Blevins teaches,

- An automation system comprising: an industrial controller for integrating a plurality of automation components in a uniform configurable running model of a respective runtime system of the industrial controller [an advanced control block implements multiple-input/multiple-output control, such as model predictive control, neural network modeling or control, within a process control system in a manner that is integrated with the control blocks implemented using a control paradigm, such as the Fieldbus paradigm, Col. 4, lines 22 – 28].

Choung teaches

- the industrial controller comprising a plurality of bus interfaces and an internal timer for generating an internal clock; a first bus coupled with a first bus interface of the plurality of bus interfaces of the industrial controller, wherein the first bus interface comprises a bus timer; a first external device coupled with the industrial controller through a second bus with a second bus interface of the plurality of bus interfaces of the industrial controller, the first external device comprising a clock source, a technical process coupled with said first bus, the technical process comprising a clock generator, wherein a main clock for the industrial controller is selected from the internal clock or the bus timer or the clock source or the clock generator. [an ASIC has a clock controller that dynamically selects an appropriate clock frequency for a resource, Abstract; further , the system clock controller contains multiple instances of the circuitry … particular resource or clock … select … memory clock … bus

clock ... CPU clock ... peripheral clock, Col. 8, lines 57 – 67; see further Fig. 3 and Fig. 4] for the purpose of dynamic clock generation [Col. 1, lines 1 – 2].

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of **Blevins** to include "the industrial controller comprising a plurality of bus interfaces and an internal timer for generating an internal clock; a first bus coupled with a first bus interface of the plurality of bus interfaces of the industrial controller, wherein the first bus interface comprises a bus timer; a first external device coupled with the industrial controller through a second bus with a second bus interface of the plurality of bus interfaces of the industrial controller, the first external device comprising a clock source, a technical process coupled with said first bus, the technical process comprising a clock generator, wherein a main clock for the industrial controller is selected from the internal clock or the bus timer or the clock source or the clock generator", for the purpose of dynamic clock generation [Col. 1, lines 1 – 2].

3. **Claims 6 – 9, 11 – 12 and 15 are rejected** under 35 U.S.C. 103(a) as being unpatentable over **Blevins** in view of **Choung**, and further in view of Steven J. Altschuler (U.S. Patent No. 6,778,971 and referred to as **Altschuler** hereinafter).

Regarding dependent claims 7 and 11,

Blevins teaches an automation system; [Col. 4, lines 22 – 28]

Choung teaches clock sources, bus clock, dynamic clock generation [Abstract, Col. 8, lines 57 – 67, and Fig. 3 & 4]

Altschuler teaches,

- prioritizing the system and user level tasks. [Col. 13, Lines 21 – 36] for the purpose of analyzing computer-based tasks to build task models. [Col. 1, lines 1 – 3]

Regarding dependent claims 8 and 12,

Altschuler teaches,

- user level tasks are loaded into the at least one user level. [Col. 7, Lines 30 – 38] for the purpose of analyzing computer-based tasks to build task models. [Col. 1, lines 1 – 3]

Regarding dependent claims 9 and 15,

Altschuler teaches,

- programmed accessing overall functionality from the user programs. [Col. 3, lines 14 – 44]

Response to Amendment

Objection

4. Applicants amend the claim to overcome the objection. The objection has been withdrawn.

Claim Rejections - 35 USC § 103

5. Applicants argue that **Cheung** reference is not related with automation technology, which is disagreed. Applicants agree **Cheung** reference relates to PALM PILOT organizer, which is well known in the art a computer system (see further official notice: wikipedia definition for PALM). **Belvins** reference discloses using workstations or personal computer to control a process, which can be a PALM system as disclosed by **Cheung** reference.

6. Applicants further argue that **Belvins** reference fails to teach a clock selection which is agreed, yet, **Belvins** reference discloses a need for using a clock source [as disclosed in specification Col. 15, lines 33 – 44] which, the clock source, can be provided by the clock source selected by the PALM within a plurality of clock sources disclosed by **Cheung** reference.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunray Chang who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. via telephone number (571) 272-3682 or facsimile transmission (571) 273-3682 or email sunray.chang@uspto.gov.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687.

The official facsimile transmission number for the organization where this application or proceeding is assigned is (571) 273-8300.

Anthony Knight
Supervisory Primary Examiner
Group Art Unit 2121
Technology Center 2100
U.S. Patent and Trademark Office

June 7, 2007